

Appl. No. 09/876,411
Amdt. Dated July 2, 2006
Reply to Office Action of September 16, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A communication apparatus comprising:

an antenna for transmitting and/or receiving a wireless signal,

a signal processing circuit for processing a signal corresponding to a wireless signal received by the antenna,

a conductive case for surrounding and housing all or part of the signal processing circuit, and an electro-magnetic wave absorber with one surface adjacent a predetermined area of the conductive case for absorbing electro-magnetic waves in order to reduce electro-magnetic waves reaching a user of the communication apparatus, and wherein the electro-magnetic wave absorber does not provide a signal that is processed by the communication apparatus, and

a conductive member provided at another surface of the electromagnetic wave absorber and being electrically connected to the conductive case.

2. (Previously Presented) A communication apparatus as set forth in claim 1, wherein said electro-magnetic wave absorber and said conductive layer are arranged between said conductive case and a head of a user of the communication apparatus.

Appl. No. 09/876,411
Amtdt. Dated July 2, 2006
Reply to Office Action of September 16, 2005

3. (Currently Amended) A portable telephone comprising:

- an antenna for transmitting and/or receiving a wireless signal;
- a microphone for generating a sound signal corresponding to an input sound;
- a circuit for generating a wireless signal corresponding to said sound signal generated by said microphone;
- a conductive shield case for surrounding and housing all or part of said circuit;
- an electro-magnetic wave absorber with one surface in contact with a predetermined area of the shield case for absorbing electro-magnetic waves in order to reduce the amount of electro-magnetic waves reaching a user of said telephone device, and wherein the electro-magnetic wave absorber does not provide a signal that is processed by the portable telephone; and
- a conductive member provided at another surface of the electric wave absorber and being electrically connected to the conductive shield case.

4. (Previously Presented) A portable telephone as set forth in claim 3, wherein said circuit comprises:

- a transmitting circuit for generating a wireless signal corresponding to a sound signal from the microphone,
- a receiving circuit for generating a sound signal in response to a wireless signal received by the antenna and outputting the sound signal, and
- a printed circuit board containing the transmitting circuit and the receiving

Appl. No. 09/876,411
Amdt. Dated July 2, 2006
Reply to Office Action of September 16, 2005

circuit, and wherein

the shield case surrounds and houses all or part of the transmitting and receiving circuit to prevent electromagnetic interference between the transmitting and receiving circuit and the antenna.

5. (Previously Presented) A portable telephone as set forth in claim 3, wherein said electro-magnetic wave absorber is arranged at an area at a surface of said shield case close to a head of a user of the portable telephone at the time of a call.

6. (Previously Presented) A portable telephone as set forth in claim 3, wherein said electro-magnetic wave absorber is closely bonded to an area at a surface of said shield case close to a head of a user of the portable telephone at the time of a call.

7. (Previously Presented) A portable telephone as set forth in claim 3, wherein said conductive layer includes a metal film formed on a surface of said electric wave absorber opposite the surface in contact with the shield case.

8. (Previously Presented) A portable telephone as set forth in claim 3, wherein said conductive layer and said shield case are connected by a metal wiring.

9. (Previously Presented) A portable telephone as set forth in claim 3, wherein the conductive layer comprises a metal plate fixed to the shield case and

Appl. No. 09/876,411
Amdt. Dated July 2, 2006
Reply to Office Action of September 16, 2005

the electro-magnetic wave absorber is formed by inserting a member between the surface of the shield case and the metal plate.

10. (Previously Presented) A portable telephone as set forth in claim 3, wherein said electro-magnetic wave absorber includes a magnetic loss material.

11. (Previously Presented) A portable telephone as set forth in claim 10, wherein said electromagnetic wave absorber is made in a desired shape from a mixture of said magnetic loss material and a synthetic resin.

12. (Previously Presented) A portable telephone as set forth in claim 4, further comprising

a switching circuit and a feeder on the printed circuit board for supplying the wireless signal from the transmitting circuit to the antenna and supplying the wireless signal from the antenna to the receiving circuit and

said feeder used for connecting the switching circuit and the antenna, and

the electro-magnetic wave absorber is closely bonded to a portion of the shield case located between the feeder and the receiver.

13. (Previously Presented) A portable telephone as set forth in claim 3, wherein said shield case is made of an insulating material and has a conductive layer formed on its surface and

Appl. No. 09/876,411
Amdt. Dated July 2, 2006
Reply to Office Action of September 16, 2005

said conductive layer is connected to a layer of a ground level voltage of said printed circuit board.

14. (Previously Presented) A portable telephone as set forth in claim 4, wherein said shield case is made of a conductive material and is connected to a layer of a ground level voltage of said printed circuit board.

15. (Previously Presented) A portable telephone as set forth in claim 4, further comprising an outer housing made of an insulating material for housing said transmitting and receiving circuit, said shield case, said electro-magnetic wave absorber, and said microphone, wherein

said receiving circuit is arranged in the vicinity of one end of said housing, said microphone is arranged in the vicinity of another end of said housing, and said antenna is a retractable antenna able to extend from said one end in the longitudinal direction of said housing.

16. (Previously Presented) A portable telephone as set forth in claim 15, further comprising

a switching circuit on said printed circuit board for supplying said wireless signal from said transmitting circuit to said antenna, and for supplying said wireless signal from said antenna to said receiving circuit and

a feeder for connecting said switching circuit and said antenna, wherein

Appl. No. 09/876,411
Amdt. Dated July 2, 2006
Reply to Office Action of September 16, 2005

said electro-magnetic wave absorber is closely bonded at the portion of said shield case located between said receiving circuit and said feeder.

17. (Previously Presented) The communication apparatus of claim 1, wherein the electro-magnetic wave absorber is a body of electromagnetic wave absorbing material having a first surface in contact with an outer side surface of the conductive case and wherein the conductive member is located at a surface of the body of electromagnetic wave absorbing material that is opposite the first surface.
18. (Previously Presented) The portable telephone of claim 3, wherein the electro-magnetic wave absorber is a body of electromagnetic wave absorbing material having a first surface in contact with an outer side surface of the conductive case and wherein the conductive member is located at a surface of the body of electromagnetic wave absorbing material that is opposite the first surface.